

KOSTYUKOV,A.A. (Odessa)

Calculation of wave-wake ordinates on the surface of a finite-depth fluid. Izv. AN SSSR Otd. tekhn. nauk no.1:27-38 Ja '55.  
(MIRA 8:8)

1. Odesskiy institut Morskogo flota.  
(Waves) (Ship resistance)

KOSTYUKOV, A.A.

USSR/ Physics - Hydrodynamics

Card 1/1 Pub. 22 - 3/40

Authors : Kostyukov, A.A.

Title : Resistance of bodies moving in liquids near a vertical wall

Periodical : Dok. AN SSSR 99/3, 349-352, Nov 21, 1954

Abstract : A solution is presented of the problem of resisting forces (wave resistance) acting on a body (a boat) moving on a free surface of a finite ideal-liquid with infinite depth. The method of mirror images and Haskind's expression of the source are used for the solution of the problem. Five Russian references (1940-1954).

Institution: Odessa Institute of Navy Engineers

Presented by: Academician A.I. Nekrasov, September 27, 1954

KOSTYUKOV, A. A.  
UESR/Physics - Hydrodynamics of wave resistance

FD-659

Card 1/1 : Pub. 85 - 14/20

Author : Kostyukov, A. A. (Odessa)

Title : Formulas for computing the wave resistance and the volumetric force  
of bodies immersed in a liquid

Periodical : Prikl. mat. i mekh., 18, 225-232, Mar/Apr 1954

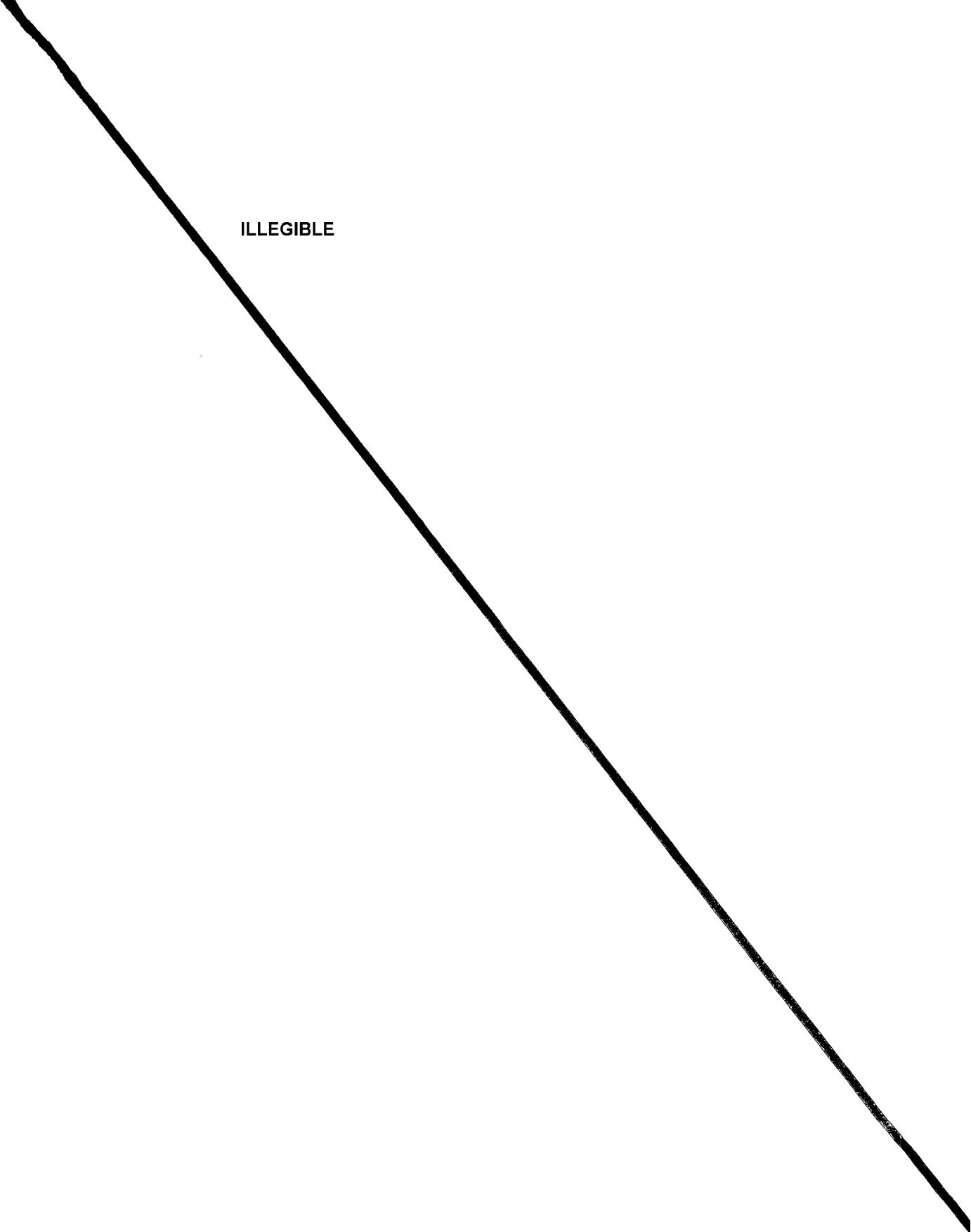
Abstract : Proceeding from the familiar general formulas of hydrodynamics for  
the forces of action of a liquid upon a body, the author gives ex-  
pressions for the wave resistance and the volumetric force for  
hydromechanical singularities and for a body of arbitrary form in  
the case where it moves in a liquid of finite and infinite depth.  
Derives expresses for the moments of the hydrodynamic forces acting  
upon the body. Seven references.

Institution : --

Submitted : April 15, 1953

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300036-6

ILLEGIBLE



the first time in history that the United States has been compelled to take such a step. The decision was made by the President after consultation with his Cabinet and the Joint Chiefs of Staff. It was based upon the following factors:

1. The situation in Korea has become so serious that it poses a threat to the security of the United States.

2. The Chinese Communists have openly threatened to attack the United States if we do not withdraw our troops from South Korea.

3. The Chinese Communists have already sent large numbers of troops and supplies into South Korea.

4. The Chinese Communists have been instrumental in causing the North Korean Communists to attack South Korea.

5. The Chinese Communists have been instrumental in causing the North Korean Communists to violate the principles of the United Nations Charter.

6. The Chinese Communists have been instrumental in causing the North Korean Communists to violate the principles of democracy and freedom of association with the people of South Korea.

1

KOSTYUKOV, A. A.

*2*

Kostyukov, A. A. On the formation of waves in the motion of a ship. Akad. Nauk SSSR. Prikl. Mat. Meh. 17, 275-284 (1953). (Russian)

For the case of a moving body submerged in a heavy fluid, Kočin [e.g., Trudy konferencii po teorii volnovogo sопrotivleniya, Izd. Central. Aero-Gidro. Inst., 1937, pp. 65-134, esp. pp. 95-101, 126-133; cf. these Rev. 13, 997] showed that the velocity potential can be written

$$\varphi(x, y, z) = \frac{1}{4\pi} \int_S \left[ \frac{1}{r} - \frac{1}{r'} + K(x - \xi, y - \eta, z - \zeta) \right] q(\xi, \eta, \zeta) dS$$

where  $q$  is determined by an integral equation:

$$q(x, y, z) = \int_S L_v(x, y, z, \xi, \eta, \zeta) q(\xi, \eta, \zeta) dS - 2v \cos(n, x).$$

Here  $r$  and  $r'$  are the distances between  $(x, y, z)$  and  $(\xi, \eta, \zeta)$  and  $(\xi, \eta, -\zeta)$  respectively,  $S$  is the surface of the body,  $v$  its (constant) velocity, and  $\nu = g/v^2$  is a parameter upon which the kernels depend. Kočin [loc. cit., pp. 126-133] showed that a solution exists for the integral equation if  $\nu$  is sufficiently large. Using an iterative scheme somewhat different from Kočin's, the author shows that the integral equation has a solution for both large and small  $\nu$  for both submerged and nonsubmerged ( $S$ =wetted surface) bodies.  $q$  is computed and shown graphically for a ship of infinite draft and parabolic waterline. He also derives asymptotic expressions for the shape of free surface for large and small  $\nu$  and derives Michell's integral for the wave resistance from an expression in terms of  $q$  given by Kočin [loc. cit., p. 110].

J. V. Weyman (Providence, R. I.).

KOSTYUKOV, A. A.

V Kostyukov, A. A. On the wave resistance of a caravan of ships. Akad. Nauk SSSR. Prikl. Mat. Meh. 17, 33-38 (1953). (Russian)

Michell's integral for the wave resistance of a "thin" ship is given by

$$R_{vn} = \frac{4\rho g^2}{\pi v^2} \int_1^\infty (J_1^2 + J_2^2) \frac{\lambda^2 d\lambda}{\sqrt{\lambda^2 - 1}},$$

$$J_{1,2} = \int_0^T \exp(-v\lambda^2 t) dt \int_{-L/2}^{L/2} \cos(\nu\lambda\xi) \frac{\partial f}{\partial \xi} d\xi,$$

where  $y = \pm f(\xi, t)$  is the equation of the hull,  $L$  and  $T$  are length and draft,  $v$  is velocity,  $g$  is acceleration of gravity,  $\rho$  is density, and  $\nu = g/v^2$ . A caravan of ships, one behind the other, all moving with the same velocity, may be treated as one long ship with zero width in the regions between ships. The author investigates the form of Michell's integral,  $R_{vn}$ , for  $n$  congruent equally spaced ships, with  $l$  the distance between centers. He finds

$$R_{vn}(l) = n \int_1^\infty G(u) du + 2n \sum_{k=1}^{n-1} \int_1^\infty \left(1 - \frac{k}{n}\right) \cos(klu) G(u) du$$

where

$$G(u) = 4\rho v^2 \pi^{-1} [J_1^2(u^2/\nu) + J_2^2(u^2/\nu)] u^2 (u - v^2)^{-1/2}.$$

From this he finds  $R_{vn} < n^2 R_{v1}$ ,  $\lim_{l \rightarrow \infty} R_{vn} = n R_{v1}$ , as one might expect, and an asymptotic formula for large  $n$ ,  $R_{vn} \sim 2n\pi l^{-1} \sum_{k=1}^\infty G(2k\pi/l)$ .

J. V. Wehausen.

KOSTYUKOV, D. A.

C 4

Effect of the current density, the distance between the electrodes, and the temperature, on the current efficiency in the electrolysis of cadmium chloride. G. A. Abramov and A. A. Kostyukov, *Zhur. Priklad. Khim. (J. Applied Chem.)* 22, 878-88 (1940).--In the electrolysis of fused CdCl<sub>2</sub> with a Cd cathode and a C anode, at 600°, the cathodic current efficiency,  $\eta$ , at c.d.  $D = 0.30-1.50$  amp./sq. cm., distance between the electrodes  $l = 1.5-3.0$  cm., was found to be in good agreement with A.'s formula  $\eta = \frac{4}{4 + b}$ , with  $b = 0.38$ . At const.  $D = 1.0$  amp./sq. cm., const.  $l = 1.5$  cm., temp. = 678, 800, 750°,  $\eta = 58.0, 43.9, 20.7$ . The exptl. data are in agreement with the temp. dependence formula  $b = [(t_0 - t)/(t_0 - l)]^2$ , where  $t_0$  = temp. of the expt.,  $t_0 = 780^\circ$ ,  $t_0 = 180^\circ$ ,  $a = 0.8$ . The temp.  $t_0$  is close to the boiling temp., but  $t_0$  is markedly below the melting temp. of CdCl<sub>2</sub>. The contrast between, on the one hand, CdCl<sub>2</sub>, and, on the other hand, ZnCl<sub>2</sub>, and PbCl<sub>2</sub>, for which  $\eta$  tends to 100% with decreasing temp., is due to the very high solv. of Cd in CdCl<sub>2</sub>. The temp.  $t_0$  corresponds to the temp. at which that solv. is very nearly zero. N. Thom

KOSTYUKIN, N., direktor.

For high quality of service to the public. Zhil.-kom.khoz. 3 no.10:23-24  
0 '53. (MIRA 6:11)

1. Pokrovskaya banya Moskvy.  
(Moscow--Baths, Public) (Baths, Public--Moscow)

KOSTYUKHINA, N. A., Cand Med Sci -- (cites) "Treatment of patients with hypertonic disease with X7-diathermia having an application to the area of carotid sinus reflexogenic zones and the lumbar section of the vegetative nervous system (under control of vascular reactions research)." Moscow, 1960. 14 pt; (Academy of Medical Sciences Publ); lab. copy; price not given; (KL, 21-60, 130)

KOSTYUKHINA, N.A.

Vascular reactions (according to plethysmographic data) to unconditioned and conditioned irritants in connection with short wave diathermy treatment of patients with hypertension. Sov.med. no.3: 54-61 Mr '55. (MLRA 8:5)

1. Iz Instituta terapii (dir. -deystvitel'nyy chlen Akademii meditsinskikh nauk prof. A.L.Myasnikov) Akademii meditsinskikh nauk SSSR.

(HYPERTENSION, ther.,

short wave deathermy, eff. on vasc. system)

(DIATHERMY, in various dis.,

short wave in hypertension, eff. on vasc. system)

(BLOOD VESSELS,

eff. of short wave diathermy in hypertension)

KOSTYUKHINA, N.A.; SERGEYEV, G.V.

Short-wave diathermy applied to the sinocarotid zones for treating  
hypertension. Trudy AMN SSSR 25:79-88 '53. (MLRA 8:8)

(DIATHERMY)

(HYPERTENSION)

KOSTYUKHIN, V.N.; MASLOVA, P.P., prof., red.; TIMOKHIN, S., tekhn.red.

[Statistics on wages in the U.S.S.R.; a concise manual] Statistika  
oplaty truda v SSSR; uchebnyi material. Pod red. P.P.Maslova.  
Moskva, Mosk.fin. in-t, 1957. 21 p. (MIRA 11:6)  
(Wages--Statistics)

KRYZHANOVSKY, V.A., inzh.; KHURAVLEV, Yu.P., inzh.;  
SADCHIKOV, L.N., inzh.; KOSTYUKHIN, V.O., inzh.

Corrosion products in the water and vapor channel of a high-pressure thermal electric power plant. Elek. sta. 35 no. 5  
11-14 my '64. (MFA 71.8)

KOSTYUKHIN, V., podpolkovnik

Ruler for facilitating calculation of a march schedule. Voen,  
vest. 41 no. 3:114-115 Mr '62. (MIRA 15:4)  
(Military maneuvers--Equipment and supplies)

KOSTYUKHIN, P.

Method used at the Chishmy Grain Elevator for feeding grain into  
shafts of the SOB dryers. Muk.-elev.prom.26 no.5:22 My '60.  
(MIRA 14:3)

1. Chishminskiy elevator Bashkirskoy ASSR.  
(Chishmy--Grain--Drying)

KOSTYUKHIN, D.

American monopolies in Africa. Vnesh.torg. 43 no.2:26-31 '63.

(MIRA 16:2)

(United States--Foreign economic relations--Africa)

(Africa--Foreign economic relations--United States)

KOSTYUKHIN, D.; NABOROV, V.

Crisis of the United States trade policy. Vnesh. torg. 42  
no.9:6-14 '62. (MIRA 15:9)  
(United States—Commercial policy)

KOSTYUKHIN, D.

Disarmament problem and international trade. Vnesh. torg. 30  
no.12:5-9 '60.  
(MIRA 13:12)  
(War--Economic aspects) (International economic relations)

KOSTYUKHIN, D.

American foreign economic policy toward Afro-Asian countries. Vnesh.  
torg. 29 no.2:26-31 '59. (MIRA 12:4)  
(United States--Foreign economic relations)

KAPELINSKIY, Yu.N.; POLYANIN, D.V.; ZOTOV, G.M.; IVANOV, I.D.; SERGEYEV, Yu.A.; MENZHINSKIY, Ye.A.; KOSTYUKHIN, D.I.; DUDUKIN, A.N.; IVANOV, A.S.; FINOGENOV, V.P.; ZAKHMATOV, M.I.; SOLODKIN, R.G.; DUSHEN'KIN, V.N.; BOGDANOV, O.S.; SEROVA, L.V.; GONCHAROV, A.N.; LYUBSKIY, M.S.; PUCHIK, Ye.P. [deceased]; KAMENSKIY, N.N.; SABEL'NIKOV, L.V.; GERCHIKOVA, I.N.; FEDOROV, B.A.; KARAVAYEV, A.P.; KARPOV, L.N.; VARTUMYAN, E.L.; SHIPOV, Yu.P.; ROGOV, V.V.; BOGDANOV, I.I.; VLADIMIRSKIY, L.A.; LEBEDEV, B.I.; ANAN'YEV, P.G.; TRINICH, F.A.; GOLOVIN, Yu.M.; MATYUKHIN, I.S.; SEYFUL'MULYUKOV, A.M.; SHIL'DKRUT, V.A.; ALEKSHYEV, A.F.; BORISENKO, A.P.; CHURAKOV, V.P.; SHASTITKO, V.M.; GERUS, V.G.; ORLOV, N.V., red.; KAPELINSKIY, Yu.N., red.; GORYUNOV, V.P., red. V redaktirovaniyu primimali uchastiye: BELOSHAPKIN, D.K., red.; GEORGIIYEV, Ye.S., red.; KOSAREV, Ye.A., red.; PANKIN, M.S., red.; PICHUGIN, B.M., red.; SHKARENKOV, Yu.S., red.; MAKAROV, V., red.; BORISOVA, K., red.; CHEPELEVA, O., tekhn.red.

[The economy of capitalistic countries in 1958] Ekonomika kapitalisticheskikh stran v 1958 godu. Pod red. N.V.Orlova, Iu.N.Kapelinskogo, V.P.Gorunova. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1959. 609 p. (MIRA 12:12)

1. Moscow. Nauchno-issledovatel'skiy kon'yunktturnyy institut.  
(Economic conditions)

KOSTYUKHIN,D.

~~United States monopolies and the Common Market in Europe [with English summary in insert]. Vnesh. torg. 28 no. 6:6-10 '58.~~  
(MIRA 11:8)

(United States--Foreign economic relations--Europe, Western)  
(Europe, Western--Foreign economic relations--United States)

KAPELINSKIY, Yu.N.; POLYANIN, D.V.; MENZHINSKIY, Ye.A.; IVANOV, I.D.; SERGEYEV, Yu.A.; KOSTYUKHIN, D.I.; DUDUKIN, A.N.; IVANOV, A.S.; FINOGENOV, V.P.; ZAKHMATOV, M.I.; SOLODKIN, R.G.; DUSHEN'KIN, V.N.; BOGDANOV, O.S.; SEROVA, L.V.; GONCHAROV, A.N.; KARKHIN, G.I.; LYUBSKIY, M.S.; PUCHIK, Ye.P.; SEROVA, L.V.; KAMENSKIY, N.N.; SABEL'NIKOV, L.V.; FEDOROV, B.A.; GERCHIKOVA, I.N.; KARAVAYEV, A.P.; KARPOV, L.N.; SHIPOV, Yu.P.; VLADIMIRSKIY, L.A.; KUTSENKOV, A.A.; RYABININA, E.D.; ANAN'YEV, P.G.; ROGOV, V.V.; BELOSHAPKIN, D.K.; SEYFUL'MULYUKOV, A.M.; PARFENOV, A.Ya.; SMIRNOV, V.P.; ALEKSEYEV, A.F.; SHIL'DIKRUT, V.A.; CHURAKOV, V.P.; BORISENKO, A.P.; ISUPOV, V.T.; ORLOVA, N.V., red.; GORYUNOVA, V.P., red.; BELOSHAPKIN, D.K., red.; GEORGIYEV, Ye.S., red.; KOSAREV, Ye.A., red.; KOSTYUKHIN, D.I., red.; MAYOROV, B.V., red.; PANKIN, M.S., red.; PICHUGIN, B.M., red.; POLYANIN, D.V., red.; SOLODKIN, R.G., red.; UFTIMOV, I.S., red.; EKHIN, P., red.; SMIRNOV, G., tekhn.red.

[Economy of capitalist countries in 1957] Ekonomika kapitalisticheskikh stran v 1957 godu. Pod red. N.V.Orlova, Iu.N.Kapelinskogo i V.P.Goriunova. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1958.  
686 p. (MIRA 12:2)

1. Moscow. Nauchno-issledovatel'skiy kon'yunktturnyy institut.  
(Economic conditions)

KOSTYUKOVICH, Z.V.

SHKABARA, M.N., doktor geologo-mineralogicheskikh nauk; KOSTYUKOVICH, Z.V.,  
inzhener.

Selecting mortars for subsequent plugging of mine shafts. Shakht.  
stroj. no.6:10-12 Je '57. (MIRA 10:7)  
(Shaft sinking) (Mortar)

KOSTYUTITCH, R. V., SHARAFI, M. M.

Rocks, Sedimentary

Method of determining the mechanical (elementary) properties of sedimentary rocks.  
DOKL. AN SSSR 52, No. 6, 1947. Red. 16 March 1951.

MONTHLY LIBRARY REPORT FORM. BIBLIOGRAPHY, SCIENCE AND TECHNOLOGY, INDIA, 1951.

KOSTYUKOVICH, Ye. B.

9(4) PHASE I BOOK EXPLOITATION 309/1778

Razushno-tekhnicheskoye obshchestvo priborostroitel'noy proizvodstvennosti. Molokovskoye pravleniye transistorovaya elektronika. Priborostroyeniye: zhurnal trudov konferentsii, "Transistor. Elektronika i instrumenty v industrii", Collection of Conference Transactions Moscow, Gostorgiz, 1959. 289 p. 1,400 copies printed.

Ed.: N.I. Chistyakov, Doctor of Technical Sciences, Professor; S.D. Khametov, Tech Ed.; V.P. Aoshkin, Managing Ed.; A.S. Zaynovskaya, Engineer.

PURPOSE: The book is intended for scientific and engineering personnel of the instrument-making and radio industries engaged in the development of electronic and radio equipment.

COVERAGE: The authors of this collection of articles discuss the theory, principle of operation, calculation and application of electronic circuits using transistors. They also describe transistor application in measuring circuits, computer, radio and automatic and remote control circuits. The book is based on transactions of the Scientific and Engineering Conference organized by NKO in Moscow in December 1956. The conference discussed 54 papers on transistors, photocells, thermocouples, cooling elements, nonlinear capacitors, crystal diodes, and transistors. A considerable number of these papers have been included in the present book. No personal names are mentioned. References appear at the end of each article.

TABLE OF CONTENTS:

Ye. B. Kostyukovich, Engineer. Analysis and Calculation of Multivibrator Relaxation Oscillators Using a Single-stage Point-contact Transistor  
The author describes the operation of a point-contact transistor multivibrator and derives basic equations for calculating  
Card 8/12

oscillator performance. He also discusses the effect of load capacitance on the shape and duration of generated pulses and describes voltage stabilizing circuits using diodes and pulse transistors. Fundamentals of designing the oscillator are also presented. There are 5 references of which 4 are Soviet and 1 English.

N.I. Chicherin, Candidate of Technical Sciences. Some Practical Circuits of Servomechanism Systems Using Transistors and Magnetic Amplifiers  
The author briefly describes the operation of single-loop and bi-loop servosystems using magnetic amplifiers, crystal diodes and transistors. There are 5 references of which 3 are Soviet and 2 English.

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KOSTYUKEVICH, N.I. [Kastsiukovich, M.I.]; MANUKOVA, K.V.

Study of the temperature of growing trees in stands. Vestsi AN  
BSSR. Ser. bial. nav. no.4:23-29 '64. (MIRA 18:12)

KOSTYUKEVICH, N.I.

Development of the growing spruce stock as related to cultivation practices. Sbor. nauch. rab. Bel. otd. VBO no.3:185-190 '61.

(MIRA 14:12)

(Forest management)

KOSTYUKOVICH, N.I. [Kostyukovich, N.I.], kand.tekhn.nauk

Effect of precipitation and ground waters on the growth of forest plantations in Polesye. Vestsii AN BSSR. Ser. biial. na. no.2:36-39 '59. (MIRA 12:9)

(POLESYE--FORESTS AND FORESTRY) (SOIL MOISTURE)

KOSTYUKOVICH, N.I., inzh.; TELIN, P.P., inzh.; PETROV, A.V., inzh.;  
SHATOV, B.M., red.; ZELENETSKAYA, L.V., red.; YERSHOVA, T.S.,  
tekhn.red.

[Reference manual for the new agricultural machinery] Katalog-spravochnik po novoi sel'skokhozlaistvennoi tekhnike. Moskva,  
Izd-vo M-va sel', khoz.RSFSR, 1959. 98 p. (MIRA 13:6)

1. Russia (1917- R.S.F.S.R.) Glavnaya inspeksiya po mekhani-zatsii sel'skogo khozyaystva.  
(Agricultural machinery)

KOSTYUKOVICH, N. I.: Doc Agric Sci (diss) -- "The hydrological role of the forests of the Poles'ye". Minsk, 1959. 56 pp (Acad Sci Beloruss SSR, Inst of Biology), 100 copies (KL, No 15, 1959, 118)

USSR/Forestry - Forest Management.

K-4

Abs Jour: Ref Zhur - Biol., No 19, 1958, 86872

Author: Kostyukovich, N. I.

Inst : Belorussian Institute of Forest Technology

Title : Increase in Productivity of Plantations in Connection with Snow Accumulation and Soil Moisture Content

Orig Pub: Sb. nauchn. tr. Belorussk. lesotekhn. in-t. 1957,  
vyp. 10, 146-157

Abstract: Data is analyzed on Prilukskoy, Prilepskoy and Zhernovskoy forest resorts and the Gantsevichskomu forest (Belorussian SSR) for the years 1937-1939, 1952, 1953, and 1952-1954. This information describes the dependence of water reserves in the snow cover on the presence of forest stands, their stocking density composition by age and species, the presence of underbrush and undergrowth; the

Card 1/2

USSR / Forestry, Biology and Typology of the Forest. K-1

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24852.

Author : Kostyukevich, N. I.

Inst : Not given.

Title : About the Water Balance in the Pine Plantings in  
the BSSR.

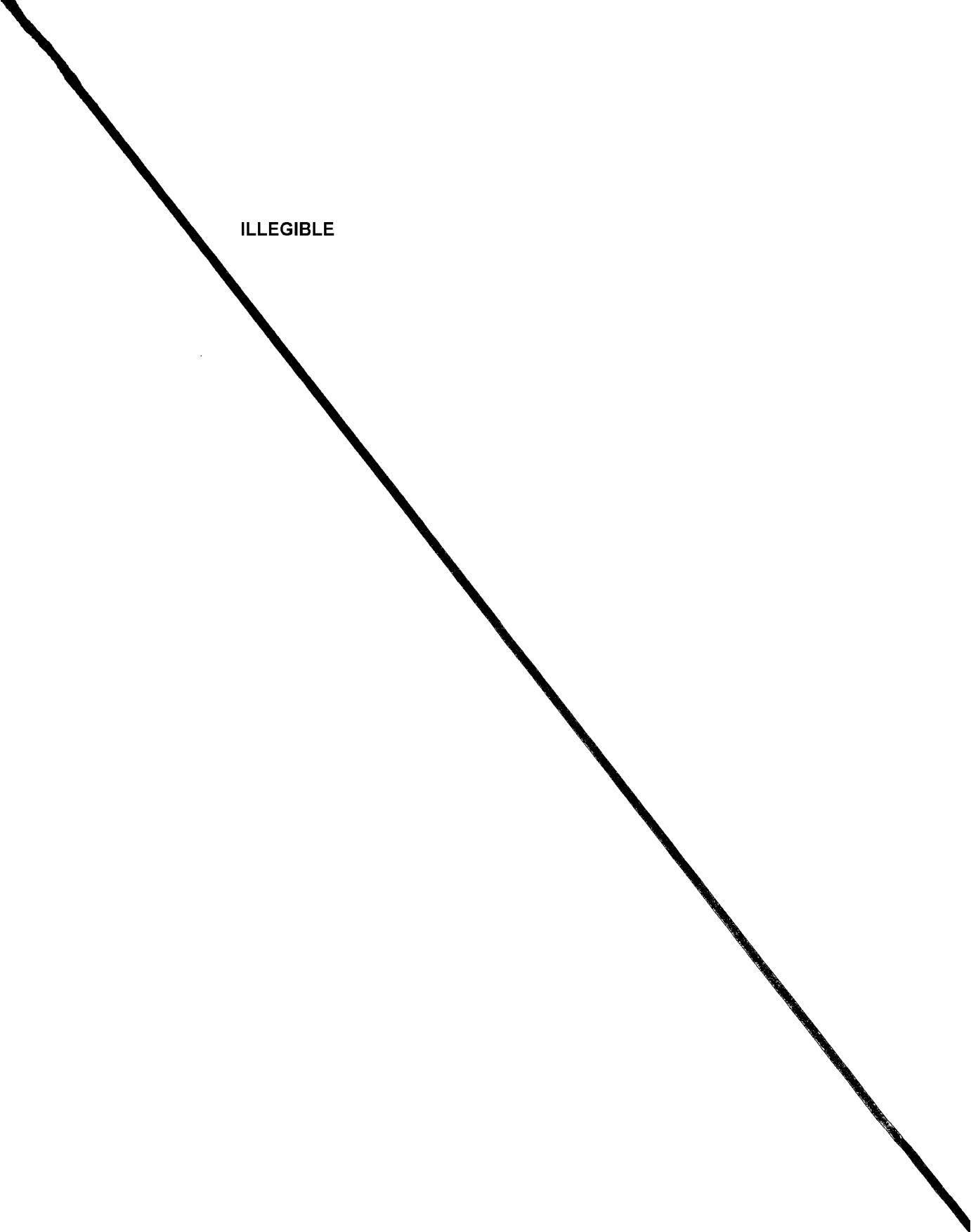
Orig Pub: Sb. nauchn. rabot po lesn. kh-vu. In-t lesa. AN  
BSSR, 1956, vyp. 7, 96-107.

Abstract: Data of the balance in the Prokudin pine forest  
are analized (for the full pine growing stocks 65-  
years of age in different types of forest), in the  
mixed woods zone (for the young pine plantings and  
the fir-foliate plantings of the IV - V age classes),  
in the Gantsevich station (for 24-year pine plant-  
ings), in the Prilepskoy woodland (for pine plant-  
ings in connection with fellings of the nursing of

Card 1/3

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300036-6

ILLEGIBLE



KOSTYUKEVICH, N.I.

Characteristics of the swamp woods of Poles'e. N.I.  
Kostyukovich. Izdat. Akad. Nauk Belarus. S.S.R. 1954,  
No. 11-74 (in Russian).—Chem. compns. (total N, P<sub>2</sub>O<sub>5</sub>,  
K<sub>2</sub>O, and CaO) and phys. characteristics (pH, sp. gr., water  
capacity, and the degree of decomprn. of the org. material) of  
the peat-swamp soils are given and their origin, and the  
characteristic plant kingdom of the area are described.

R. Wiericki

KOSTYUKOVICH, N.

79130 Poverkhnostnyy stok na suglinitakh pochvakh. Book v usloviyah lesa i pdya  
Izvestiya Akad. nauk bSSR, 1949, No. 4, s. 175-81

SU: Rezopis' Zhurnal'nykh Statey, No. 39, Moskva, 1949

166T40

USSR/Hydrology - Water Losses Sep/Oct 48  
Soil Studies

"Retention of Precipitation by Grass and Moss  
Covers," N. I. Kostyukovich

"Meteorol i Gidrol." No 5, pp 86-88

Experiments in artificial wetting of various types of grass and moss covers gave following results: (1) composite oak-spruce cover can retain up to 0.3 mm of precipitation (for cut of certain area and depth); (2) oats crop retains up to 0.5 mm; (3) meadowland pastures

USSR/Hydrology - Water Losses Sep/Oct 48  
(Contd)

retain up to 1.2 mm, and (4) moss cover of Hypnum and Rhyacomium retains up to 4.0 mm.  
Submitted 19 May 47.

166T40

166T40

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S/139/60/000/004/040/044/XX  
E073/E535

On the Speed of Contact Fusion of Alkali-Haloid Crystals

fuse and in the thus formed liquid phase the solid components dissolve. The last stage of the process can be characterized by the speed of contact fusion which corresponds to the speed of dissolution of the crystals at elevated temperatures in a solvent consisting of the liquid solution of its components. In the work described in this paper the speeds of contact fusion were measured for a number of alkali-haloid crystals on pressed powder specimens of the investigated salts, 6.5-3.5 mm high and 12.2 mm diameter. From the experimentally determined linear speed of contact fusion, the activation energy of the contact fusion was determined for NaCl in KCl, NaCl in KI, KI in KCl and NaBr; these were respectively (in cal/mol): 37850, 45200, 35300, 17000. The following conclusions are arrived at:

- 1) The linear (and specific) speed of contact fusion of alkali-haloid crystals coincides with the speed of the solution of the crystal in the melt, which represents the solution of the given component (NaCl, KI) in the other component.
- 2) The linear (and specific) contact fusion depends on the temperature and obeys the law  $v \propto e^{-U/RT}$ .

Card 2/3

26.2510

7089

S/139/00/000/004/090/000, XX  
E073/E535

AUTHORS: Savintsev, P. A., Avruchcheva, V. Ye and Zelenskaya, N. V.

TITLE: On the Speed of Contact Fusion of Alkali-Haloid Crystals

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika 1960,  
No. 4, pp. 107-109

TEXT: In earlier work (Ref.5) the authors stated that contact fusion is observed in crystals forming eutectic alloys or continuous series of solid solutions which have a minimum on the fusibility curve. In later experiments (Ref.6) the authors measured the temperature dependence of the lattice periods of the components in the mixture of KCl and KI powders, the temperature dependence of the coefficient of the surface and volume diffusion in single crystals of KCl-NaCl, KCl-KBr, KCl-KI and the temperature dependence of the electric conductivity of the mixtures of the powders KI-NaCl, KI-NaBr. They found that the initial stage of contact fusion of the crystals under consideration is the mutual dissolution of the solid components; this continues until interlayers of solid solutions form along the contact boundaries, the compositions of which correspond to a minimum of the fusibility curve or to the boundaries of solubility of the eutectic systems. The easily fusible interlayers

✓

Card 1/3

KOSTYUKHEVICH, M.P. [Kastsiukevich, M.P.] (Minsk); LUTSEVICH, Ya.M. (Minsk);  
VOINOVA, N. [Voinava, N.] (Mogilev)

What should be the relations of friendship. Rab.i sial. 35 no.1:16  
Ja '59. (MIRA 12:3)

(Friendship)

AL'SHTS, Yakov Isaakovich, dots.; VERKLOV, Boris Abramovich; VOROVITSKIY, Abram Nakhimovich, dots.; KOSTYUKEVICH, Fedor Vasil'yevich, dots.; MALEYEV, Georgiy Vasil'yevich, dots.; OSOKIN, Pavel Andreyevich, assist.; ROZENBERG, Boris Lazarevich, dots.; LADYGIN, A.M., inzh. retsenzent; SHURIS, N.A., red.; SHOROKHOVA, A.V., red. izd-va; BOLDYREVA, Z.A., tekhn. red.; MAKSIMOVA, V.V., tekhn. red.

[Mining machinery] Gornye mashiny. By IA.I.Al'shits i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 491 p.  
(MIRA 14:12)

1. Glavnyy inzhener Spetsial'nogo konstruktorskogo byuro Kopeyskogo mashinostroitel'nogo zavoda (for Verklov).

(Mining machinery)

KOSTYUKOVICH, F.V., inzhener.

Selecting parameters for cleaning stopes. Mekh. trud. rab. 11 no.2:  
24-25 F '57.  
(MLRA 10:5)

1. Donetskiy industrial'nyy institut.  
(Coal mines and mining)

*Konferentsiya po issledovaniyu i izucheniiu maschin dlia vymeki uglia*

AL'SHITS, Yakov Isaakovich, dots.; KOSTRYUKOVICH, Fedor Vasil'yevich;  
ARZAMASOV, N.A., otvetstvennyy red.; BKKER, O.G., tekhn.red.;  
ALADOVA, Ye.I., tekhn.red.

[Apparatus and methods used in research on machines for excavating  
coal] Apparatura i metody issledovaniia mashin dlia vyemki uglia.  
Moskva, Ugletekhizdat, 1957. 95 p. (MIRA 11:2)

1. Donetskij industrial'nyy institut (for Al'shits)  
(Coal mining machinery)

KOSTYUKEVICH, F. V.

USSR/Miscellaneous--machine construction

Card 1/1

Authors : Al'shite, Ya. I., Cand. in Tech. Sci., Docent; Vorovitskiy, A. N., Cand. in Tech. Sci., Docent; and Kostyukovich, F. V., Cand. in Tech. Sci., Docent

Title : Ball type safety clutches

Periodical : Vest. mash. 34/3, 20-24, Mar/1954

Abstract : The number of kinds of safety clutches is limited. There are clutches in which one of the links breaks under overload, friction clutches, and clutches in which the gripping is done by means of teeth, balls, sliding blocks, etc., which slip over each other. Calculations of coefficients of friction are given along with pressures required for various situations, for which equations are worked out.

Institution : .....

Submitted : .....

KOSTYUKOVICH, F. V.

Priblizhennoe opredelenie koefitsienta formy zuba pri rasschete zubnykh kolos.  
(Vestn. Nauch., 1950, no. 5, p. 5-8)

Approximate determination of the coefficient of tooth shape in calculating  
gear wheels.

DIC: TMI.WI

SD: Manufacturing and Mechanical Engineering in the Soviet Union, Library  
of Congress, 1953.

L 26071-66

ACC NR: AT6015374

caused by the change in the crystal structure of the films. The optimum plating current density for low coercive force films is in the range between 1 and 1.5 amp/dm<sup>2</sup>.  
Orig. art. has: 2 figures.

[BD]

SUB CODE: 09/ SUBM DATE: 15Dec65/ ATD PRESS: 4254

Card 2/2 CC

146071-66 ENT(m)/EWP(t) LJP(c) JD/GS  
ACC NR: AT6015374 SOURCE CODE: UR/0000/65/000/000/0191/0193

AUTHOR: Kostyuk-Kul'gavchuk, L. P., Il'yushenko, L. F.

ORG: none

42

671

TITLE: The influence of current density on the coercive force of electrodeposited films

SOURCE: AN BSSR. Institut tekhnicheskoy kibernetiki. Vychislitel'naya tekhnika (Computer engineering). Minsk, Nauka i tekhnika, 1965, 191-193

TOPIC TAGS: magnetic thin film, magnetic coercive force, current density

ABSTRACT: In an extension of previous work the authors investigated the relationship between current density and coercive force during electroplating on copper substrates of thin 80% Ni-20% Fe films. Films with thicknesses ranging from 500 to 5000 Å and current densities from 0.3 to 2 amp/dm<sup>2</sup> were used. The films were deposited at room temperature in the presence of 500-oe magnetic fields applied parallel to the film surface in electrolytes with pH factors of 2.7-3. The test results indicate that the minimum coercive force is obtained when the current density is approximately 1 amp/dm<sup>2</sup>. Lowering the current density causes an increase in the coercive force due to a change in the crystal structure and composition of films. The percentage of Fe in this case increases. High current density (above 1.8 amp/dm<sup>2</sup>) gives rise to an increased coercive force for films with thicknesses of 2000-5000 Å. This increase is

I 26075-66

ACC NR: AT6015373

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in which the copper foils were drawn in the rolling operation during manufacture. To exclude the influence of copper substrate texture on experimental results, new substrates were carefully polished and used in the next series of tests with films 3000 Å thick. Again no correlation could be found between the magnitude of applied field and coercive force and field of anisotropy. However, the axis of easy magnetization in this case aligned itself with the direction of the applied field.  
Orig. art. has: 2 figures.

[ED]

SUB CODE: 09/ SUBM DATE: 15Dec65/ ATD PRESS: 4253

Card 2/2 CC

L 26075-66 EWT(m)/EWA(d)/EWP(t) IJP(c) JD/GS  
 ACC NR: AT6015373 SOURCE CODE: UR/0000/65/000/000/0188/0191

AUTHOR: Il'yushenko, L. F.; Sheleg, M. U.; Kostyuk-kul'gavchuk, L. P.

ORG: none

TITLE: The influence of a constant applied magnetic field during the electro-deposition process on the coercive force and anisotropy field of a permalloy film

SOURCE: AN BSSR. Institut tekhnicheskoy kibernetiki, Vychislitel'naya tekhnika (Computer engineering), Minsk, Nauka i tekhnika, 1965, 188-191

TOPIC TAGS: magnetic thin film, magnetic coercive force, magnetic anisotropy

ABSTRACT: To investigate the influence of an applied magnetic field on the magnetic properties of permalloy films during film formation by electroplating, fields ranging from 0 to 500 oe were utilized. Films were made by plating 80% Ni—20% Fe on 0.07—0.08 mm polished copper foils in a sulfuric acid solution. The film thickness was 2000 Å. The fields, created with Helmholtz coils, were parallel to the films. The electrolyte current density was 1.1 amp/dm<sup>2</sup>, and the pH factor was 2.7—3. In the range of applied magnetic fields, the coercive force and the field of anisotropy did not exhibit any correlation with the magnitude of the applied field. Changing the pH factor of the electrolytic solution had no effect on the coercive field and field of anisotropy. It was noted that the axis of easy magnetization did not depend on the direction of the applied field but was colinear with the direction

Card 1/2

ACCESSION NR: AP4040925

rectangularity factor of the hysteresis loop of 0.85. Thermomagnetic treatment in vacuum lowered the coercive force to 2 oe. Orig. art. has: 1 figure.

ASSOCIATION: Institut matematiki i vy\*chislitel'noy tekhniki AN BSSR  
(Institute of Mathematics and Computing Technique, AN BSSR)

SUBMITTED: 09Jul63 ATD PRESS: 3068 ENCL: 01

SUB CODE: MM NO REF Sov: 003 OTHER: 004

ACCESSION NR: AP4040925

S/0250/64/008/005/0309/0311

AUTHOR: Kostyuk-Kul'gavchuk, L. P.

TITLE: Obtaining magnetic films by the electrolytic method

SOURCE: AN BSSR. Doklady\*, v. 8, no. 5, 1964, 309-311

TOPIC TAGS: electronic calculating machine, magnetic film, electrolytic method

ABSTRACT: An investigation has been made of the method of electrolytic deposition of magnetic film used for computers. Permalloy (77% Ni, 23% Fe) film was deposited on copper foil. The deposition was carried out in sulfate electrolyte in a magnetic field of 75 oe with an anode of pure nickel at a temperature of 50—60C. It was found that to obtain a permalloy film 1000—2000Å thick, it was necessary to use an electrolyte having the following composition:  $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ , 270—290 g/l;  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ , 10—13 g/l;  $\text{H}_3\text{BO}_3$ , 30 g/l; phenol, 1 g/l. The dependence of the magnetic properties of a permalloy film on the pH of an electrolyte is given in Fig. 1 of the Enclosure. The film obtained had a coercive force of 3—5 oe and a

Card 1/3

Thermal Stresses (Cont.)	SOV/6086
Shevchenko, Yu. N. [Kiev]. Application of the Theorem of Reciprocity of Work to the Investigation of Elastic-Plastic Problems	62
Shevchenko, Yu. N. [Kiev]. State of Stress of Rapidly-Rotating Non-uniformly Heated Disks Under Power-Law Plasticity Conditions With Strain Hardening	75
Vol'mir, A. S., and P. G. Zykin [Moscow]. Stability "in the Large" of Shells Under Creep Conditions	81
Podstrigach, Ya. S., and V. Yu. Kruchkevich [L'vov]. On the Effect of Inertial Forces on the State of Stress Caused by Periodic Changes in the Temperature Field	89
Komarov, G. N., Z. D. Kostyuk, M. B. Ustinovskiy, and G. A. Tabiyeva [Kiev]. Measuring Temperatures and Deformations in a Medium-Thick Disk	97

Card 4/6

Thermal Stresses (Cont.)

SOV/6086

COVERAGE: The book contains 18 articles dealing with investigations connected with thermal stresses in turbine components. Individual articles discuss thermoelasticity, thermoplasticity, thermal conductivity, and temperature fields. No personalities are mentioned. References accompany 17 articles. The conference recommended broadening the theoretical and experimental investigations of aerothermoelastic and aerothermoplastic problems, the development of investigations of general problems of the theory of thermoelasticity and thermoplasticity based on the thermodynamic principles of reversible and nonreversible processes, the development of effective calculation methods for thermal stresses taking into account plastic deformations and creep in thin- and thick-walled structural members under stationary and nonstationary operating conditions, the development of experimental-research methods for thermometry and tensiometry in connection with modern operational conditions of mechanical structures, and the broadening of investigations of problems in the thermostrength of structures, especially of those operating under conditions of frequent and sharp temperature changes.

Card 2/6

KOSTYUK, Z. D.

20

PHASE I BOOK EXPLOITATION

SOV/6086

Nauchnoye soveshchaniye po teplovym napryazheniyam v elementakh turbomashin.  
2d, Kiyev, 1961.

Teplovyye napryazheniya v elementakh turbomashin; doklady nauchnogo soveshchaniya, vyp. 2 (Thermal Stresses in Turbomachine Parts; Reports of the Scientific Conference, no. 2). Kiyev, Izd-vo AN UkrSSR, 1962. 174 p. 1800 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut mekhaniki.

Resp. Ed.: A. D. Kovalenko, Academician, Academy of Sciences UkrSSR; Ed.: T. K. Remennik; Tech. Ed.: A. M. Lisovets.

PURPOSE: This collection of articles is intended for scientific workers and turbine designers.

Card 1/6

KOSTYUK, Z.D. (Kiyev); ZHURAVEL', A.Ye. [Zhuravel', O.O.] (Kiyev);  
GRZHIBOVSKIY, V.V. [Grzhybovs'kyi, V.V.] (Kiyev)

Investigating the stressed state of axial-flow compressor  
nozzles. Prykl.mekh. 6 no.2:202-214 '60.  
(MIRA 13:8)

1. Institut stroitel'noy mekhaniki AN USSR.  
(Compressors--Aerodynamics)

*Kostyuk, Z.D.*

## PLEASE FILL IN BOOK INFORMATION

SCIENTIFIC

Academy of Sciences of the USSR. Institute of Mathematics  
Zadachi teplotnostnoj i uprugoshestvennoj mehaniki (Problems of Temperature and  
in Power-Mechanics) Collection (Problemy fiziko-mekhanicheskoy  
Ed. of Publishing House, T.T. Remenik, Rep. L: N.Y. Sovin, Krasnogorsk,  
Academy of Sciences, Moscow; Tech. Ed. O.M. Lysorets.)

PURPOSE: This book is intended for turbine engineers.

CONTENTS: This book is a collection of 2 Russian articles based on work under  
the general supervision of A.P. Kovalevko. Each article has a short summary  
in Russian. The object of the study is to test turbine elements for steady  
conditions, especially those due to nonuniform heating. References accompany  
each article.

- Kovalevskii, A.P. Nonstationary Thermal Conductivity in a Cylinder of  
Finite Length 101  
Korobko, V.P., and Z.D. Kostyuk. Investigation of Thermal Stresses in  
Disk 129  
Bobylev, I.S., M.I. Sosulin, and Yu.M. Semenchenko. Certain Methods of  
Solving an Axially Symmetric Problem in the Theory of Elasticity by Means  
of a Grid Integrator 145  
Korobko, V.P. Investigation of Thermal Stresses in a Circular Plate of  
Varying Thickness by Means of the Integral Differential Analyzer 162

104

Card 3/3

104  
104/48

KOSTYUK, Z.D.

Measuring static thermal stresses under unsteady thermal  
conditions. [Izd.] IONITOMASH 51:32-37 '59. (MIRA 12:12)  
(Thermal stresses--Measurement)

KOROLEVICH, Yu.S. [Korolevych, Iu.S.] (Kiyev); KOSTYUK, Z.D. (Kiyev);  
ZHURAVEL', A.Ye. [Zhuravel', O.O. (Kiyev)

Investigating stresses in a turbine semishaft. Prykl. mekh. 5  
no.3:330-336 '59.  
(MIRA 13:2)

1. Institut stroitel'noy mekhaniki AN USSR.  
(Turbines--Testing)

Theory (Cont.)	SOV/2557
Dumov, P.D. Counter for Strain Cycles (Deformations) of a Given Magnitude	73
Baranov, D.S. Principles of Construction of Multichannel Strain- gage Instruments for Simultaneous Observation and Recording of a Series of Processes	79
Arshanskiy, B.E., and L.A. Leyfer. Semiconductor-type Voltage Converter for Feeding Strain-gage Instruments from Low-voltage D-C Sources	92
Polyakov, A.A. Current-wave Recording in Measuring Dynamic Processes With Strain Gages	100
Grzhibovskiy, V.V. Method of Welding Circuit Wires in an Experimental Investigation of the Deformations in Rotating Parts at Temperatures up to 400° C.	104
Piven, I.D. Problems of Calibrating Strain-gage Instruments During	
Card 4/5	

## Theory (Cont.)

SOV/2557

- Shmakov, E.M. Instruments With Wire Strain Gages for Measuring Vibratory Displacements of Soil 25
- Kostyuk, Z.D. Experimental Measurements of Static Thermal Stresses Under Nonstable Thermal Conditions 32
- Matskevich, D.D. Use of Wire Strain Gages for Measuring Small Forces, Pressures, and Fluid-flow Velocities 38
- Shal'nikov, G.I. Experience With the Use of Vibrometers With Wire Strain Gages For Measuring Amplitude and Frequency of the Vibrations of Small Surfaces 50
- Arshanskiy, B.E. Vibrometers With Wire Strain Gages 55
- Petrov, L.V. Universal Cathode-ray Oscillographic Equipment for Experimental Investigation of Machines. Possibilities for Improvement 60

Card 3/5

Theory (Cont.)

SOV/2557

COVERAGE: This is a third issue of the collection of scientific papers presented at the Leningrad Scientific and Technical Conference on the Theory and Use of Wire Strain Gages, held in May 1958. The papers describe the use of instruments with wire strain gages to investigate different parameters of machine parts and mechanisms during operation. No personalities are mentioned. References follow several of the papers.

TABLE OF CONTENTS:

Tyukel', G.I. Measurement of the Pressure and Flow Rate of a Gas, Using Diaphragm- and Bellows-types of Elastic Elements With Wire Strain Gages	3
Etingof, M.I. Application of Foil-type Strain Gages in Instruments for the Shop Control of Rolling Processes	11
Kustanovich, M.S. Use of Strain Gages in the Manufacture of Hydraulic Turbines	21

Card 2/5

Kostyuk, Z.D.

9(6)

PHASE I BOOK EXPLOITATION SOV/2557

Nauchno-tehnicheskoye obshchestvo mashinostroitel'noy promyshlennosti.  
Leningradskoye oblastnoye pravleniye

Provolochnaya tenzometriya (Theory and Application of Wire Strain  
Gages) Moscow, Mashgiz, 1959. 138 p. (Series: Leningradskiy  
dom nauchno-tehnicheskoy propagandy, kn. 51) 3,500 copies  
printed.

Sponsoring Agency: Nauchno-tehnicheskoye obshchestvo priborostroi-  
tel'noy promyshlennosti.

Ed.: A.M. Turichin; Ed. of Publishing House: M.A. Chfas; Tech.  
Ed.: L.V. Shchetinina; Managing Ed. for Literature on the  
Technology of Machine Building (Leningrad Division, Mashgiz):  
Ye.P. Naumov.

PURPOSE: This collection of papers is intended for engineers,  
scientific workers, and technicians making calculations for  
strength in machinery.

Card 1/5

KOSTYUK, Z.D.

Experimental study of thermal stresses in gas turbine disk models  
[with summary in English]. Dop. AN URSR no.3:258-262 '58.

(MIRA 11:5)

1. Institut budivel'noi mekhaniki AN URSR. Predstavлено академиком  
AN USSR F.P. Belyankinym.  
(Gas turbine disks--Models)

KOSTYUK, Z. D.

"The Condition of Stress in a Circular Cylindrical Shell With One Fixed Curvilinear Edge," by Z. D. Kostyuk and S. K. Osokina, Institute of Structural Mechanics, Academy of Sciences Ukrainian SSR, Prikladna Mekhanika, Vol 3, No 2, 1957, pp 209-214

A parameter  $\chi = \frac{1}{\sqrt{Rh}}$  (l = length, h = thickness, R = radius

of curvature) was used as a criterion in an experimental stress analysis of uniformly loaded models of a thin circular cylindrical shell. In regard to stress distribution, the results were in good agreement with theoretical data obtained in accordance with Vlasov's approximate moment theory. The middle region of the shell acts like a complete (closed) circular cylindrical shell. The maximum meridional stresses are exerted along the fixed edge, and the maximum circumferential stresses are exerted on the free edge in the middle section. The experimental results indicated that the calculated (theoretical) error increases with an increase of the parameter  $\chi$ ; the deviation between the maximum values of the meridional stresses obtained by experimentation and by calculation amounts to 45 percent when  $\chi = 1.3$ . (U)

2007/4/16/

KOSTYUK, Yu.A. [Kostiuk, IU.O.]

Materials on the study of the fauna and ecology of leaf rollers  
(Lepidoptera, Tortricidae S. Str.) of the Ukraine. Pratsi Inst.  
zool. AN URSR 20:150-168 '64. (MIRA 18:4)

KOSTYUK, Yu.A. [Kostiuk, Ю.О.]

New species of leaf rollers (Lepidoptera, Tortricidae) in the  
Ukraine. Dop. AN UkrSSR no. 4:533-536 (1965).

I. Institut zoologii AN UkrSSR.

(Ukr. 13:5)

KOSTYUK, Yu.A. [Kostyuk, Ю.О.]

New species of leaf rollers (Lepidoptera, Tortricidae) in the  
Ukraine. Dop. Ak. UkrSSR no. 12:1641-1644 '65.

(MIN. 12:1)

I. Institut zoologii AM UkrSSR. Submitted December 3, 1964.

KOSTYUK, Yu.A. [Kostiuk, Iu.O.]

New materials on the fauna of leaf rollers (Lepidoptera, Tortricidae) of the Ukraine. Dop. AN UkrSSR no. 5:689-691 '64.

(MIRA 17:6)

1. Institut zoologii AN UkrSSR. Preustavlenno akademikom AN UkrSSR A.P. Markevichem [Markeych, O.P.].

БИЧУК, И.С.; ЧЕРНЯВ, В.С., альбомы

Geometric types of the gneissites of the verablen-schistite series in metamorphic rocks. Dokl. AN SSSR 194 no. 2 p. 303-306 1965.

(MIRA 18:10)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.

KOSTYUK, Ya. Ye.

Viticulture

Inverted stratification of grape shoots with manure heat. Vin. SSSR 13, No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. UNCLASSIFIED.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300036-6

GRIGOR'YEV, Yu.I., inzh.; KOSTYUK, V.V., inzh.; KARANOV, B.P., inzh.

Operation of automated remote control for main SRT engines.  
Sudostroenie 30 no.9:44 S '64. (MIRA 17:11)

L 42396-66	EWT(m)/T/EWP(t)/ETI	IJP(c)	JD/JG
ACC NR:	AP6018449	SOURCE CODE:	UR/0051/66/020/006/1074/1076
AUTHOR: <u>Shklyarevskiy, I. N.; Yarovaya, R. G.; Kostyuk, V. P.; Lelyuk, L. G.</u>			67 61 B
ORG: none			
TITLE: Effect of deposition rate and annealing on the optical contents of precious metals			
SOURCE: Optika i spektroskopiya, v. 20, no. 6, 1966, 1074-1076			
TOPIC TAGS: high purity metal, metal film, metal deposition, optic constant, metal crystallization, metal physical analysis, metal vapor deposition, refractive index, absorption coefficient			
ABSTRACT: At a high evaporation rate, the metal atoms reaching the substrate have a large reserve of energy which is expended in their migration on the substrate and formation of crystals; the result is a coarse-grained polycrystalline layer. Conversely, at a low evaporation rate, the kinetic energy of the atoms is insufficient for migration, hence a large number of crystallization centers is generated, producing a layer with fine crystalline structure. For the spectral region where the light absorption depends on free electrons, the optical constants are related to the effective collision frequency of electrons with other electrons, phonons and structural defects. Since grain boundaries are the predominant structural defects in a finely dispersed			
Card 1/2		UDC: 535.321 + 535.341 : 553.41	

MOSHKOVICH, I.B.; MUSHIY, R.Ya.; KOSTYUK, V.P.

Study of the phlegmatization of diacetylene explosive disintegration  
with inert solvents. Khim. prom. 41 no.2:57-59 F '65. (MIRA 18:4)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300036-6

SHKLYAREVSKY, I.N.; KOSTYOK, V.P.; TELYOK, L.G.; TAROVAYA, R.G.

Magnitude and sign of the phase difference  $\Delta\phi_p - \phi_s$  arising in  
total internal reflection. Opt. i spektr., 18 no. 1, 853-857 My '65.

(MIRA 18:10)

GURULAV, G. A., KUTYOK, V. P., RABOLOVA, B. N., KIRYAKOV, N. I.

Find of zinc diopside in "Iberia", East. MOUNTAIN SYSTEMS OF  
1965.  
(MOSCOW, 1971)

I. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR  
Submitted March 9, 1971.

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R000825300036-6

4-61562-65

ASSOCIATION NMN 4P5012673

ASSOCIATION: None

SUBMITTED: 92Apr64

ENOLI 00

SUB CODE: OF

NR REP SOV: 014

OTHER: 003

K  
Card 3/5

L 6/50-65

ACCESSION NR: AP50-2613

the case of ordinary reflection. To this end, the author first measured the phase difference using apparatus described elsewhere (Opt. i spectr. v. 9, 640, 1950). A method is proposed for reconstructing the linear polarisation of the light reflected from a metallic surface by means of compensation via total internal reflection. This method makes it possible to measure the optical constants in single reflection of light from a small sample. It is shown that the phase difference arising in total internal reflection is negative. A formula is given for this phase and a plot of its dependence on the angle of incidence. A method is proposed, based on this conclusion, for measurement of optical constants on the basis of the reconstruction of linear polarisation described by the authors elsewhere (Opt. i spectr. v. 7, 561, 1957). An advantage of the method over the Drude method is that the measurements are made at angles which are much smaller than the principal angles, making it possible to go into the infrared region. Orig. art. has: 3 figures and 6 formulas.

Cord 2/3

J. SIE/12-65

ACCESSION NR: A85012613

UR/0051/65/018/005/0853/0857 28  
535 394 B

AUTHORS: Shklyarevskiy, I. N.; Kosolapov, V. P.; Lelyuk, I. O.

TITLE: On the magnitude and sign of the phase difference arising in the case of total internal reflection

SOURCE: Optika i spektroskopiya, v. 13, no. 5, 1965, 853-857

TOPIC: Light reflection, phase shift, light polarization, opto-constant, IR spectrum

ABSTRACT: This is a continuation of earlier work by one of the authors (Shklyarevskiy, Opt. i spektro., v. 14, p. 247, 1963) and earlier devoted to the phase difference produced when light is reflected from a movable surface. It is pointed out first that in the literature there is found as much disagreement concerning the sign and magnitude of the phase difference occurring in total internal reflection as in

Card 1/3

KOSTYUK, V.P.

Genesis of alkali rocks in the Eastern Sayan Mountains. Geol. i geofiz.  
no. 9:10-24 '64.  
(MIRA 18:7)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR, Novosibirsk.

KLYAROVSKIY, V.M.; KOSTYUK, V.P.

Age of alkali rocks in the eastern part of the Eastern Sayan Mountains. Dokl. AN SSSR 162 no.2:405-407 My '65. (MIRA 18:5)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.  
Submitted January 13, 1965.

KOSTYUK, V.P.; LUCHKO, A.G.

Endogenetic and metamorphic apatite deposits of Siberia and the Far East and the prospects for their utilization for obtaining phosphate fertilizers. Geol. i geofiz. no.10:90-103 '64.

(MIRA 18#4)

1. Institut geologii i geofiziki Sibirskego otdeleniya AN SSSR,  
Novosibirsk.

KOSTYUK, V.P.

Complement to the diopside-hedenbergite-aegirine diagram. Dokl.  
AN SSSR 156 no. 3:571-574 '64. (MIRA 17:5)

1. Institut geologii i geofiziki Sibirskogo otdeleniya AN SSSR.  
Predstavлено академиком V.S.Sobolevym.

SOPOLIEV, V.S., nukademik, otd. red.; LEBEDEV, A.I., zin. otd. red.;  
DUBOVY, E.L., red.; ZHOTUKIN, V.V., red.; KALYUK, V.I.,  
red.

[Plateau basaltov] bagdaty plato. Moskva, Nauka, 1964. 135 p.  
(Izs: Doklady sovetskikh geologov. Problema 7) (MIRA 37;9)

I. International Geological Congress. 12th, 1964.

KERKIS, T.Yu.; KOSTYUK, V.P.

Mineralogic and thermometer study of Botogol nepheline (Eastern  
Sayan Mountains). Dokl. AN SSSR 150 no.5:1125-1127 Je '63.

(MIRA 16:8)

1. Institut geologii i geofiziki Sibirs'kogo otdeleniya AN SSSR,  
Novosibirsk. Predstavлено akademikom V.S.Sobolevym.

(Botogol Mountain--Nephelite--Analysis)

KOSTYUK, Vadim Pavlovich; TKACHUK, L.G. [Tkachuk, L.H.], doktor geologo-min. nauk, otv. red.; MEL'NIK, G.F. [Mel'nyk, H.F.], red. izd-va; MATVIICHUK, O.O., tekhn. red.

[Geology and petrography outline of magmatic activity in the Carpathian Mountains] Geologo-petrografichnyi narys magmatyzmu Karpat. Kyiv, Vyd-vo Akad. nauk URSR, 1961. 156 p.

(MIRA 14:9)  
(Carpathian Mountains--Rocks, Igneous)

KOSTYUK, V.P.; ZOLOTUKHIN, V.V.

Formation of hypabyssal intrusions of amphibole-pyroxene andesites  
in Transcarpathia. Geol.sbor. [Lvov] no.7/8:129-142 '61. (MIRA 14:12)

1. Institut geologii poleznykh iskopayemykh AN USSR, L'vov.  
(Transcarpathia--Andesites)

L 330-55  
ACCESSION NR. AF0005158

ENCLOSURE: Q1

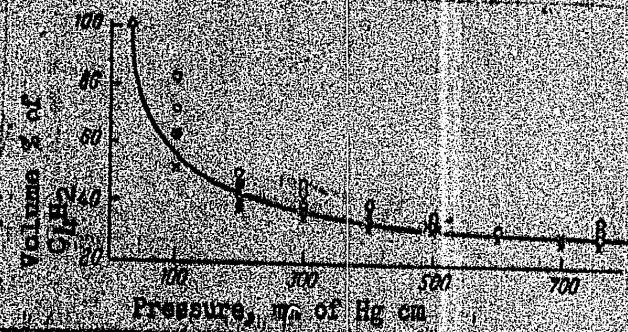


Fig. 1. Limits of explosive decomposition  
of diacetylene-nitrogen mixtures

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L 11105-65

ACCESSION NR: AF9005158

helium-48 compared to argon at the same heat capacity results in higher flegmatization. Org: art, heat 10 figures.

ASSOCIATOR: none

SUBMITTED: CO

ENCL: 01

SUB CODE: CC, CC

NO REC Sov: 000

OTHER: 000

Card 2/3

<u>14-45-00145</u>	<u>CIA(R)/CIA/CIA/EM/EM/EM/EM</u>	<u>PL</u>	<u>X/</u>
ACCESSION NR: AP5005158	S/0004/65/000/002/0057/0059		
AUTHORS: Moshkovich, A. B., Shuryg, R. Ya., Tsvyuk, I. P.	35		B
JOURNAL: Investigation of the flegmatization by inert diluents of the explosive decomposition of diacetylene.			
SOURCE: Khimicheskaya promyshlennost', no. 2, 1965, 57-59			
TOPIC TAGS: explosive decomposition, propane, butane, hexane, methanol, benzene, argon, helium, ignition, heat capacity, thermal conductivity/ KHT 2M gas chromatograph			
ABSTRACT: Pure diacetylene and its mixtures containing 0 to 40 vol % of propane, butane, hexane, methanol, benzene, vinylacetylene, methylacetylene, argon, and helium were prepared and purified by the usual methods. After analysis on a KHT-2M gas chromatograph they were ignited by sparks from a Rumkoff coil at various pressures up to 700 mm Hg. Explosions (or their absence) were recorded as shown in Fig. 1 on the Androlaire. It was found that explosive decomposition of diacetylene may be prevented by various diluents. The flegmatizing effect of the diluents increases with their heat capacity. The high thermal conductivity of			
Card 1/3			

KOSTYUK, V.P.

New data on the petrography and geology of Transcarpathian volcanic rocks. Pratsi Inst. geol. kor. kop. AN URSS 2:47-58 '60.

(MIA:14:4)

(Transcarpathia---Rocks, Igneous)

KOSTYUK, V. P., Doc Geol-Min Sci -- (diss) "Meso-Cenozoic magmatic activity in the Carpathians." L'vov, 1960. 30 pp; 6 pages of charts; (Ministry of Higher and Secondary Specialist Education Ukrainian SSR, L'vov State Univ im I. Franko); 150 copies; price not given; list of author's works on page 30 (10 entries); (KL, 17-60, 143)

ZAVARITSKIY, A.N. [deceased]; SOBOLEV, V.S.; KVASHA, L.G.; KOSTYUK, V.P.  
BOBRIYEVICH, A.P.

New diagrams for determining the composition of high-temperature  
plagioclases. Zap. Vses. min. ob-va 87 no.5:529-541 '58.

(Plagioclase) (MIRA 12:1)

SOBOLEV, V.S.; KOSTYUK, V.P.

Geology of Neocene volcanic rocks in Transcarpathia. Trudy Lab.vulk.  
no.13:243-254 '58.  
(MIRA 12:3)  
(Transcarpathia--Volcanic ash, tuff, ect.)

KOSTYUK, V.P.

Mineralogical characteristics of magmatic garnets in Transcarpathian volcanites. Min.shor. no.12:280-296 '58.  
(MIRA 13:2)

1. Institut geologii poleznykh iskopayemykh AN USSR, L'vov.  
(Transcarpathia--Garnet)

20-2-47/60  
New Data on the Age of Garnet-Containing Liparite Dacites of the Soviet Trans-Carpathians (Zakarpat'ya)

the conceptions by Trusova was not quite successful either. There are 20 references, 3 of which are Slavic.

ASSOCIATION: Institute for the Geology o. Mineral Resources AN Ukrainian SSR (Institut geologii poleznykh iskopayemykh Akademii nauk USSR)  
PRESENTED: April 11, 1957, by D. S. Korzhinskiy, Academician  
SUBMITTED: April 2, 1957  
AVAILABLE: Library of Congress

Card 3/3

20-2-47/60

New Data on the Age of Garnet-Containing LIPARITE-DACITES of the Soviet Trans-Carpathians (Zakarpat'ya)

widely spread. The exact dating of age can neither be made in Zakarpat'ye nor in Slovakiya, as no micro- and macrofauna was found. The authors analyze the rocks occurring here according to publications (references 4-11, 13-20). In them they consider 2 moments as especially important: 1) The garnet-containing rocks of the zone of foothills and of the northern slopes of the Poprichnyy massif in East-Slovakiya (and thus also those of the village of Perechin on the right bank of the Uzh-river) are according to a number of their petrographic-mineralogical and petrochemical properties identical, 2) the age-span from the Paleogenetic to the Pannonian, in which these garnet rocks are placed, is confined to the range of Tortonian - Lower Sarmatian. It is not out of the question that the acid rocks of Perechin are of the same age as the Lower-Sarmatian liparites of the Beregovskoye hills. I. F. Trusova (reference 3) erroneously drew a parallel between all acid rocks of the Vygorlat-Gutinskaya volcanic chain (predominantly in the interfluvial region Borshava-Tissa) and the Beregovskoye-liparites. But they have a different age: the latter a Lower-Sarmatian Age, whereas the liparites and dacites of the volcanic chain gravitate towards the upper part of the Pannonian. The attempt made by Slavik (reference 12) to determine the age of the tuffs of Benyatin from

Kostyuk, V. P.

AUTHORS: Kostyuk, V. P., Sasin, G. G. 10-2-47/60  
TITLE: New Data on the Age of Garnet-Containing LIPARITE-DACITES of the Soviet Trans-Carpathians (Zakarpat'ya) (Novyye dannyye o vozraste granatovykh liparito-datsitov sovetskogo Zakarpat'ya)  
PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 2, pp. 369 - 372 (USSR)  
ABSTRACT: Sprinklings of garnet exist in these comparatively small intrusive bodies of liparite-dacites. These intrusive bodies lie amid lava-pyroclastic rocks of an andesite composition of Pannonian age and in the neighboring rocks of the Cretaceous-Paleogenetic flysh in the northwestern part of the Vigorlat-Gutinskaya volcanic chain (Massif Poprichnyy). The liparite-dacites were considered the youngest rocks and were placed higher than all effusives in stratigraphic schemes. In the relevant works (references 1, 18, 19) the problem of the age of the garnets in the total complex of volcanogenic rocks is hardly touched upon. According to Sobolev (reference 1) the formation of garnet must have taken place in considerable depths because of the high pressure necessary for it. In other words the peculiarity of these rocks might represent a very important moment in the coordination of the stratigraphic schemes of this region and East Slovakia (Slovakiya) where these rocks are comparatively

SOV/11-59-1-8/16

On the Question of Miocene(Pre-Pannonian) Volcanism of Transcarpathia

va, K.Ya. Gurevich, N.V. Dabagyan, G.N. Grishkevich, I.V. Venglinskiy, L.S. Pishvanova, T.N. Baykovskaya, D.P. Bobrovnik, V.S. Sobolev, D.V. Gurzhiy, S.M. Korenevskiy, M.B. Ripun, L.G. Tkachuk, G.A. Nechayev, V.N. Utrobin, L.A. Ivanova and A.I. Klichuk. There are 2 maps and 1 table and 56 references, 21 of which are Soviet, 15 Czechoslovak, 9 Rumanian, 6 Hungarian, 4 Polish and 1 German.

ASSOCIATION: Institut geologii poleznykh iskopayemykh AN USSR, Lvov (Institute of Geology of Mineral Resources, AS Ukr SSR, L'vov)

SUBMITTED: May 9, 1957

Card 2/2

AUTHOR: Kostyuk, V.P. 207/11-59-1-8/16

TITLE: On the Question of Miocene (Pre-Pannonian) Volcanism of Transcarpathia (K voprosu o miotsenovom(dopannonskom) vulkanizme Zakarpat'ya)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, Nr 1, pp 63-80 (USSR)

ABSTRACT: The author compiled his article from studies made by Soviet and foreign geologists on volcanic activity in the region of the Transcarpathian foothill depression during the Miocene(pre-Pannonian) period. A comparison of the main tufaceous Miocene layers in the Transcarpathian region with those of the Inner Carpathian regions shows that the volcanic activity in the Transcarpathian region was correlated with that in other parts of Carpathian regions. In table 1 the author presents a list of various volcanic rocks of the different regions, which, according to him were formed in the same geological time, up to the Lower Sarmatian time of the Miocene period. The following Soviet geologists were mentioned by the author: O.S. Vyalov, N.P. Yermakov, I.A. Korobkov, I.B. Pleshakov, V.I. Slavin, N.S. Filimono-

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